SOFTWARE USER'S MANUAL

for the

JOINT DEPLOYABLE INTELLIGENCE
SUPPORT SYSTEM

JDISS SERVER & CLIENT SEGMENTS
FOR
GCCS 2.1/2.2

Version 2.0

29 July 1996

Joint Deployable Intelligence
Support System
Program Management Office
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Suitland, Maryland

based on
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Section 1

SCOPE

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1 SCOPE

1.1 Identification

This Computer System Reference Manual (CSRM) applies to the Joint Deployable Intelligence Support System (JDISS) version 2.0.

1.2 System Overview

The JDISS program provides a family of hardware and software capabilities allowing connectivity and interoperability with the intelligence systems that support forces in garrison and deploy in times of peace, crisis, and war. JDISS provides the Joint Intelligence Centers (JIC), Joint Task Forces (JTF), and other operational commanders with on-site automation support and the connectivity to make best use of the Intelligence Community's resources. This system is also the technical baseline for the

Department of Defense (DoD) Intelligence Information System (DoDIIS) Client-Server Environment (CSE). JDISS provides the foundation for achieving strategic and tactical interoperability.

JDISS provides:

· Timely, secure, and direct access to theater and national intelligence resources.

· Basic imagery analysis and dissemination capabilities.

· Specific office automation and support functions.

The JDISS Program, a DoDIIS core project, merges existing capabilities and off-the-shelf products to satisfy Unified and Specified (U&S) Command and Service / Agency requirements. The result is an integrated group of applications, hardware platforms, packaging options, and communications interfaces configured for specific needs. The equipment and software form an in-garrison and field-deployable intelligence support system that provides timely intelligence support to operational forces.

JDISS provides the following capabilities:

· Communications - Alert provides the ability to send an immediate high priority message to the distant end. Chatter is a secure and convenient back channel communications tool between JDISS terminals worldwide to assist in real-time problem solving, analysis, and dissemination issues. It provides a full duplex, interactive communications path via the keyboard. Pings provides the ability to check system connectivity to the communications path. Jvox provides a secure voice activated communications path between users. XFTP provides the ability to? transfer and receive files between two systems. Send File provides an additional method of file transfer between JDISS system. Collage provides an interactive whiteboard for sending screen grabs, images, graphics, and text; as well as providing a corresponding chatter capability.

· Electronic Mail (E-Mail) - Personal and shared mail consists of attached images, documents, or spreadsheets for general dissemination at the destination or a specific user at the destination.

· Office Tools - Provides word processing, electronic spreadsheets, and business graphics.

· Imagery - The ability to input external video sources (scanned photographs, video tape, etc.) into the system, manipulate them, and attache them to E-Mail messages or reports for dissemination.

· Utilities - Miscellaneous functions that allow you to print or save screens; import and export DOS files; display a time zone clock; access a calculator and calendar; and set or change your password.

1.3 User Interface

JDISS was designed for ease of use. It uses a GUI much like an Apple Macintosh or Microsoft Windows. When you start JDISS, the display looks something like the Figure shown below. This is the normal JDISS display, or desktop. It is the point from which all JDISS functions initiate.?

Figure 1.3-1. JDISS Desktop

The JDISS user login screen consists of a security banner as well as the JDISS User Desktop,

desktopCHATTER, and the Console window.

· Security Banner - Set by your Security Manager. The security banner displays the highest classification level authorized for the machine as well as the machine's name and the name of the currently logged-on user.

· JDISS Main Desktop Window - The desktop window contains a set of icons representing the various applications accessible with the system. Section 3 of this Reference manual addresses each of these applications and functions in detail.

· Console Window - Displays operating system messages.

· DesktopCHATTER - Provides user-to-user, interactive communications. See Section 3.2.2.2 for further explanation.?There is one additional element that appears on all JDISS displays - the cursor or pointer. The pointer is the visual marker whose position on the screen is controlled by the mouse or trackball.

Appendix A contains a detailed description of the JDISS graphic user interface.

1.4 Document Overview

This document follow the format specified in DOD-STD-2167A, Defense System Software Development, of 29 Feb 1988 as tailored under MIL-HDBK-287, A Tailoring Guide for DOD-STD-2167A - Defense System Software Development, of August 1989. It provides basic user information about:

· The JDISS hardware and software.

· Normal operation of the JDISS application software.

JDISS is an integrated collection of commercial software programs that urn on a Unix workstation. The system is designed so that the choice of the host platform and the details of the operating system are nearly invisible to the User. During normal operation, the basic procedures needed to use the JDISS software are provided in the Reference Manual.

Normal JDISS operation as described in this Reference Manual requires no knowledge of the Unix operating system. However, while the procedures in the CSRM are presented in such a form that an operator with no Unix expertise can perform them, they will be much more meaningful to an operator who possesses some fundamental knowledge of computer organization and the Unix operating system.

This Reference Manual is comprised of five sections and three Appendices:

· Section 1 introduces the system and defines the scope of this CSRM.

· Section 2 provides the list of references upon which this document is based. Excluding DOD-STD-2167A and MIL-HDBK-287, this list represents the minimum documents that may be photocopied, used, and discarded.

· Section 3 describes normal system operation. The information contained therein is presented in checklist form. The checklists are formatted as stand-alone documents that may be photocopied, used and discarded.

· Section 4 is reserved by DOD-STD-2167A for later use.

· Section 5 contains a Glossary, a List of Acronyms and an Index.

· Appendix A contains JDISS User Interface fundamentals. It assumes that the reader has never user a GUI or a mouse/trackball.

· Appendix B describes the capabilities of the Security manager login.

· Appendix C provides an overview of the capabilities of System Administrator login.

1.5 Conventions

This document uses the following set of conventions for clarity and ease of use:

Text Conventions

· Descriptions of the JDISS application software operator interface are consistent with the terminology described and used in the JDISS Reference Manual.

· Any message or prompt that is printed in a window by the operating system or the JDISS application software will be shown in Courier type.

· Any command that the operator is to type is shown in bold type.

· A word enclosed in square brackets represents the inscription on the keycap of a key that your are to depress; for example, [Return] means press the "Return" key.

· Pointed brackets, <>, indicate that a case dependent or variable is required.

·Curly brackets, {}, indicate that a case dependent or variable entry is optional.

Hot Keys

Many menu options provide keyboard alternatives to the normal mouse-driven operation. These are called "hot Keys" or "Accelerators." An option having a hot key alternative will be written in the following form on the screen and in this document:?Option ... (ÙT)

The underlined character ("O" in this case) is used with the Meta key to achieve the same result as clicking on the menu. The Meta keys appear on either side of the space bar; on SPARCstations, they are marked with a diamond. To use a hot key, hold down the Meta key and press the key corresponding to the underlined character. This must be done while the menu containing the option is visible on the screen.

If a character combination is visible to the right of the option label (ÙT in our example), this is an accelerator and may be used at any time, whether the menu is visible or not. Simply hold down the [control] key and press the letter key.

General Conventions

This document is written for a system User who has had some exposure to application software packages. Knowledge of the Unix operating system is not required. Because of the preponderance of SUN SPARCstations in the field, this draft document is geared towards that hardware suite. Differences between the SPARCs and other hardware suites are identified where appropriate.
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Section 2

Referenced Documents

?2 Reference Documents

This section contains only those documents directly referenced within this manual.

2.1 Government Documents

2.1.1 Specifications, Standards, and Handbooks

DOD-STD-2167A, Defense System Software Development, Washington DC 20301, 29 February 1988.

MIL-HDBK-287, A Tailoring Guide for DOD-STD-2167A, Defense System Software Development, Washington DC, 11 August 1989.

2.1.2 Other government Documents and Publications

Joint Deployable Intelligence Support System (JDISS) Version 1.01 Computer System Reference Manual, 30 September 1993.

2.2 Non-Government Documents

The reference documents provided with JDISS vary with the hardware suite.

2.2.1 All Hardware Suites

Applix User's Guide, Applix Inc., 112 Turnpike Road, Westboro, MA 01581.

X.desktop User's Guide, IXI Software Inc., 11440 Commerce Park Drive, Reston VA 22091.

ELT/2 User's Guide, Paragon Imaging, 73 Princeton street, North Chelmsford, MA 01863.

desktopCHATTER, Paragon Imaging, 73 Princeton street, North Chelmsford, MA 01863.

Synchronize, Crosswinds Technology, Inc., 6630 Highway 9, Ste 204, Felton CA 95018.

Interleaf, Prospect Place, 9 Hillside Avenue, Waltham MA 02154

Newsprint, SUN Microsystems, 2550 Garcia Ave., Mountain View, CA 94043-1100

VideoPix, SUN Microsystems, 2550 Garcia Ave., Mountian View, CA 94043-1100

Collage, National Center for Supercomputing Applications (NCSA), University of Illinois.

JVOX, Naval Research Laboratory.

? Hippi, Vividata Inc., 1250 Addison St., Ste 213A, Berkley, CA 94702.

XFTP, Lawrence Livermore National Laboratory Technology Transfer office, P.O. Box 808, Livermore, CA 94550.

Client Server Environment - System Services by Sterling Software Information Technology Division, 1404 Fort Crook Road South, Bellevue Nebraska, 68005-2969 for Rome Laboratory / IRDD Griffiss AFB N.Y. 13441-4114

2.2.2 SUN SPARCstations Hardware Suites

800-4826-10 Desktop SPARC, Sun System User's Guide, SUN Microsystems, Inc., Mountain View, VA, 1990. This booklet is provided with the equipment.

800-5035-10 Desktop SPARC, Sun System Installation Guide, SUN Microsystems, Inc., Mountain View, VA, 1990. This booklet is provided with the equipment.

800-5416-10 Desktop SPARC, Sun System & Network Guide, SUN Microsystems, Inc., Mountain View, VA, 1990. This booklet is provided with the equipment.

2.2.3 Hewlett Packard Hardware Suites

HP-UX, Hewlett Packard Company, 3404 Each Harmony Road, Fort Collins, CO. 80525-9988

Section 3

Execution Procedures

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3 EXECUTION PROCEDURES

3.1 Introduction:

JDISS is an integrated collection of commercial software programs that run on a Unix workstation. The system is designed so that the choice of the host platform and the details of the operating system are nearly invisible to the User. The basic procedures needed to use the JDISS software during normal operations are provided in this Reference Manual. Normal JDISS operation as described in this Reference Manual requires no knowledge of the Unix operating system. However, while the procedures in this Reference Manual are presented in such a form that an operator with no Unix expertise can perform them, they will be much more meaningful to an operator who possesses some fundamental knowledge of computer organization and the Unix operating system.

3.1.2 To Log into the JDISS application software as a user:

Power up the equipment. The system runs a quick series of self-tests to verify that all CPU components function. Upon completion of the self-tests, the bootstrap program executes automatically. The end result of the bootstrap program is a system login prompt:

<system ID> login:

1. __ Type:

   <system ID> login:<Your User ID> [Return]

2. __ The system responds with the Password: prompt, enter your password.

   Password:<Your Password> [Return]

3. __ If the password you entered was not the correct password for the login ID that you used, the system will respond with a Login incorrect message and give you another opportunity to login. Respond by entering your user ID.

   Login incorrect
   Login:<Your User ID> [Return]

4. __ The system again presents you with the Password: prompt, enter your password.

Password:<Your Password> [Return]

If you are still denied access to the system, see your Security Manager to verify your User ID and Password.

If you entered the correct User ID-Password combination, the system responds by displaying a security warning screen, and then opening the standard GCCS Desktop. Upon Launching the JDISS Segment, the window shown in Figure 3.1.2-1 appears.

Figure 3.1.2-1. X.desktop Window (User)

3.1.3 Application Software Configuration

Once installed, the JDISS applications are fully functional and ready to go. The default settings provided during system installation will meet most sites' needs. However, the "look and feel" of some of the applications can be configured to meet the particular needs of any site.

X.desktop: For most sites, the X.desktop settings provided during the initial installation will be satisfactory. However, your System Administrator and Security Manager have access to functions for customizing X.desktop preferences. There are two main preference categories; Main Desktop Preferences and General Preferences. Talk to your System Administrator or Security Manager or consult the X.desktop Help facility for more details about customizing your environment.

Applix: As opposed to X.desktop, the Applix set of applications allows each individual user to alter much of its "look and feel" by changing preferences and customizing the Menu Bar. These options are found under the asterisk symbol [*] menu in any Applix application.

3.2 Operating Procedures

The JDISS system provides a wide range of functions in a single workstation. The basic JDISS desktop, also called the DoDIIS desktop, is shown in Figure 3.2-1. Since all JDISS functionality is accessed through the desktop window, we begin with an overview of X.desktop.

Figure 3.2-1. JDISS Desktop

3.2.1 X.desktop

X.desktop is a COTS software product, developed by IXI Inc. of Cambridge, England. It provides a friendly GUI (Graphic User Interface), much like an Apple Macintosh or Microsoft Windows, to shield the user from the intricacies of the Unix operating system. The GUI is comparable to the top of a desk which may contain items like file folders, papers, and reference materials that you take out, move around, and put away as required to do your job.

In addition to the standard Motif window decorations, this window contains five pulldown menus, and a work area through which JDISS functions are accessed.

3.2.1.1 X.desktop Window Pulldown Menus

For the standard JDISS user, the X.desktop window contains five pulldown menus:

File - The File menu controls the general operation of the objects on the desktop. The File pulldown menu items include:

- Discard - Discard permanently removes the highlighted file.
- Exit - Exit X.desktop shuts down all active functions and returns you to the JDISS Login prompt.
- Save - Saves desktops including icons and their relative position.
- Save as - Saves a copy of the current desktop with a new name.
- Find - Searches for specified files.
- Open Main Desktop - Opens the main desktop.
- Close all Directories - Closes all open directories.
- Close this Desktop - Closes current desktop window.
- New Desktop - Creates a new empty desktop.
- Properties - Displays properties of selected file or directory, including: ownership, permissions, and size.

Edit - This function selects or de-selects all icons on the desktop.

View - The View menu selects how the window contents display; either by icons or by name. View also permits the icons or names to be neatly arranged and reorganized.

Options - This function permits setting preferences for the Main Desktop, Desktop, and General preferences. Preferences for Main Desktop may be specified for color, fonts, and patterns. General preferences include specifying colors and format for icons, dialog windows and pop up menus, as well as specifying performance characteristics for mouse functions.

Help - The X.desktop on-line Help facility covers every function available in the particular application. You proceed through the Help facility in a systematic fashion; or, you access individual areas as questions occur. The Help pulldown menu items include:

- On Desktops - Explains the setup and function of the desktops.
- On Selected - This function activates a facility that provides immediate help on any X.desktop item at which you are pointing.
- Version - This function displays product name, copyright, and version number information.
- On Help - This functions activates the Deskhelp window which explains how to use the help functions.
- Index - This function activates the Master Index of Books which details help concerning:

  Help On Deskhelp
  Getting Started

Authoring Deskhelp
International Country Codes
US Area Codes

3.2.1.2 The Work Area

All JDISS applications are accessed through the work area.

· Communications, described in Section 3.2.2, provides the means to engage other JDISS sites in informal, two-way chat sessions. Chat sessions are like telephone calls, except that you type instead of speak. Communications also includes alerts for priority message passing and pings which is used to test the communications path between sites. Communications also provides a means to send files both to JDISS and non-JDISS systems. A new function under Communications includes the use of secure voice and Collage, a white board utility.

· Remote_Services, (also referred to as DODIIS Services) described in Section 3.2.3, provides access to remote database systems at both the national and theater level.

· Office_Tools, described in Section 3.2.4, provides access to Applix functions (Words, Spreadsheets, and Graphics) as well as CorelDRAW and Interleaf.

· Images, described in Section 3.2.5, starts Paragon Imaging's Electronic Light Table, the JDISS imagery manipulation tool. Images also contains JUIC, Imagine, Hippi, and Digital Camera access.

· Utilities, described in Section 3.2.6, provides access to various tools such as DOS management, Backup/Restore to tape, printer management, and miscellaneous functions like calendars, clocks, and calculators. Utilities also includes access for the CDROM drive, SoftWindows, and Video_Pix.

· Trash, described in Section 3.2.7, provides a way to delete or recover directories or files.

· Shared_Target, described in Section 3.2.8, provides a quick way to make personal files available to other users and other systems.

· Shared_Dir provides an easily accessed area for sharing files.

· Corporate_Services provides access to site-specific functions.

· Intelink. Mosaic window that provides access to various databases and files across the network.

· Email provides for both personal and shared electronic mail via Applix.

· Mapping Tools. ARC_Info provides mapping information.

· JDISS_Help accesses the JDISS Users Guide and JES, JDISS Embedded Support, an interactive JDISS tutorial.

· Screen_Lock is an icon to lock the system while the user is away from the terminal. Specified

password must be entered prior to resuming system usage.

· Home displays the contents of the home directory for the user logged on the system.

The various functions are accessed by double clicking left on the appropriate icon.

3.2.2 Communications

Communications provides several means of connecting to other sites. Primarily Chatter and Jvox provide user-to-user, interactive, communications via the keyboard and secure voice; while Send_File and XFTP transfer files between sites. Alert sends critical messages, while JPings tests the communications pathway for connectivity. Collage provides a white board utility.

3.2.2.1 Alert

The JDISS Alert function sends short, high priority messages that demand the recipient's immediate attention, somewhat like a "flash" message. The system at the distant end must have a user logged onto the system in order for an alert to be received.

To send an Alert

1. __ Double click left on the Alert icon in the Communications window. The Send_Alert window appears as shown in Figure 3.2.2.1-1 below.

Figure 3.2.2.1-1. Send Alert Window

2. __ Click left in the "Enter Message Here" portion of the window. Type a message.

Or

3. __ To load an ascii message into the message area click on File/Open File. Select the desired file from the Select File dialog window that appears. Click on OK or Cancel to close the window. The ascii file load in the Send Alert window.

4. __ Select the site to receive the alert message by clicking with the left mouse button on the Send or Send Registered button in the middle of the Send Alert window, or by using the Send pulldown menu and selecting either Send or Send Registered. The rConnect_popup window appears as shown below:

Figure 3.2.2.1-2. rConnect_popup Window

5. __ Choose the site to receive the alert by either double clicking with the left mouse button on the hostname, or by clicking once to highlight the hostname then clicking left on the

OK button at the bottom left corner of the rConnect_popup window.

6. __ The system at the distant end will receive the following indication that an alert has been received if the alert was sent registered:

Figure 3.2.2.1-3. Registered Alert Window

7. __ Once the distant end acknowledges that the alert was sent, the sending system receives a pop-up window as follows:

Figure 3.2.2.1-4. Registered Alert Acknowledged Window

Saving Alert Messages

1. __ From the Send Alert window, click left on the File pulldown menu and select Save. The Save window opens. Enter the path and filename of the alert message to save. Click left on OK to save the file and close the window.

Figure 3.2.2.1-5. Save Alert Window

Responding to an Alert

1. __ From the Send Alert window, click left in the Enter Reply Here area and type a response. Click on Send to send the response.

2. __ To close the Send Alert window, click left on the File pulldown menu and select Quit. The Send Alert window closes and the distant end receives the following pop-up window:

Figure 3.2.2.1-6. Alert Termination Window

3.2.2.2 Chatter

The Chatter function allows for informal communications between users at different JDISS sites. All Chatter functions are accessed through the Chatter window.

To begin a chat session

1. __ Double click left on the Communications icons. The Communications window opens. Double click left on the Chatter icon. The desktopCHATTER window opens as displayed in Figure 3.2.2.2-1.

Figure 3.2.2.2-1. Chatter Window

2. __ Click left on the Invite button. The Invite to a new conference window opens as shown below:

Figure 3.2.2.2-2. Invite to a new conference window

Custom Window icon selects which chatter protocol to use. As shown in the window below JDISS 2.0 accomodates chatter, DITDS, and talk protocols.

Figure 3.2.2.2-3. Custom invite Window

Area Manager icon enables customization of chatter for specific site needs as shown in the window below:

Figure 3.2.2.2-4. Area Manager Window

3. __ Click left on the Hosts window icon. The Hosts invite window opens as shown in Figure 3.2.2.2-5.

Figure 3.2.2.2-5. Hosts invite Window

4. __ Enter the hostname in the Hostname entry area or select a hostname from the Host area and click left on Query to load the User@Host selection.

5. __ The User@Host field appears on the right side of the window. Click left to highlight the address of the requested chat session, then click left on the OK button. The Hosts invite window closes, and the User@Host address appears under the Invite List of the Invite to a new conference window.

6. __ Click to select an address under the Invite List, then click on OK.

7. __ The new conference window closes, and the New Session window opens. Typed text appears in the lower portion of the window. When ready, click left on Send.

Figure 3.2.2.2-6. New Session Window

8. __ To save chatter sessions, click left on the File pulldown menu and select Save As. The Save Chatter Buffer As window opens. Use the directory displayer to specify the path where the file is saved. Click left in the Filename area and type a filename. Click left on OK to save the chatter session to the specified directory.

Figure 3.2.2.2-7. Chatter Save Window

To respond to a chat session request

1. __ On the remote machine, in the Invitation to Conference New Session window, click left on Accept. The Invitation to Conference New Session window closes, and the New Session window displays.

2. __ At the receiving site, the Invitation to Conference New Session window opens. The receiving site either clicks left on Accept or Reject. Reject ends the chatter session.

Figure 3.2.2.2-8. Acknowledge Chatter Session Window

To Print a Chatter Session

1. __ From the New Session window, click left on the File pulldown menu and select Print. The Print window opens.

Figure 3.2.2.2-9. Print Window

2. __ Select desired features to print chat sessions.

To Change Chatter Send Sequence

1. __ From the New Session window, click on the File pulldown menu. Click on the button to disable the Send on <CR>. Click on the button to enable the Send Sequence. The Send Sequence window opens.

2. __ From the Send Sequence window, click on the button to Enable Send Sequence. Click on the button to Enable Sending Send Sequence and enter in the Sending Sequence (EX: ovr). Click on the OK button.

3.2.2.3 JPings

The Pings function is a communications troubleshooting tool. It checks the connection between JDISS terminals. If you experience problems communicating with another site, Pings can tell whether your terminal can "see" the intended recipient.

Using JPings

1. __ Double click left on the JPings icon in the Communications window. The Pings window shown in the Figure below appears:

Figure 3.2.2.3-1. Pings Window

2. __ Select the host you wish to ping by highlighting the hostname with the left mouse button.

Start pinging by clicking left on the File pulldown menu and selecting Start Pings. The lower portion of the window displays the pings status. A sucessful ping shows a green "GO" circle as shown below:

Figure 3.2.2.3-2. Sucessful Ping Window.

3. __ An unsucessful ping shows a red "NO GO" circle as shown below:

Figure 3.2.2.3-3. Ping Attempt Window

3. __ Click left on the Dismiss button to close the ping status window.

3.2.2.4 Jvox (Interactive Packet Voice Terminal - Secure Voice)

Provides an interactive method between locations to exchange voice messages in a secure manner.

Configuring Jvox

Jvox may be configured for either full or half duplex operations. To set Jvox for full duplex:

1. __ Double click left on the Jvox icon in the Communications window. The window shown in the Figure below appears:

Figure 3.2.2.5-1. Jvox Window

2. __ Click on the Configure button, the Configure window opens as shown below:

Figure 3.2.2.5-2. Jvox Configure Window

3. __ Click left on the Vocoder pulldown button and select ALPC2400 (Adaptive 2400 baud).

4. __ Select either Real Time or Non-real Time from the Playback mode. When the desired selections are made click left on OK. The Configure window closes and returns to the Jvox main window.

Initiating a Call

1. __ Click left in the Remote Party area of the Jvox main window. Enter: userid@hostname, click left on the Call button. The Jvox window displays the status for "CALLED:...". If the called station does not respond within 30 seconds, the status in the Jvox window changes to "IDLE: (Timed out, no response)."

2. __ When the distant end accepts a call (by clicking on the Accept Call button in the window that appears), a Call Reply is sent to the originator. A display for CONNECTED status indicates a sucessful connection. In full duplex mode, either party may click on the PTT (Push to Talk) button to send voice. In half duplex mode, only one party at a time may talk, then use PTT to send voice to the distant end. A 30 second timer initiates once the PTT is depressed.

3.2.2.5 FTP (File Transfer Protocol)

JDISS provides the capability of sending files between stations using the Unix File Transfer Protocol (FTP).

To send a file

1. __ Double click left on the XFTP icon in the Communications Window. The File Transfer Utility window appears as shown in the Figure below.

Figure 3.2.2.5-1. File Transfer Utility Window

2. __ Click left on the Connect pulldown menu on the left side of the window. Click on Connect to Remote to bring up the hosts selection window as shown below:

Figure 3.2.2.5-2. Connect... Window

3. __ Select the destination from the Hosts listing, then click with the left mouse button on the Connect button. If the connection between the two systems is up the following window will display:

Figure 3.2.2.5-3. FTP Login window

4. __ Click left in the Enter the user name: area and type your login for the remote system. Click with the left mouse button on OK. The system responds by requesting a password for the specified login name on the remote system as shown in the window below:

Figure 3.2.2.5-4. FTP Password window

5. __ Once the correct password for the specified login account has been entered, the FTP window displays the connection to the remote system on the left side of the FTP window.

6. __ From the left side of the FTP window, click left on the Dir pulldown menu. Change Directory changes directories on the remote system, while Make Directory provides a method of creating sub-directories on the remote system within the permissions set for the specified user login account.

7. __ From the right side of the FTP window, click left on the Connect pulldown menu. Select Connect to Local. The contents of the listed directory for the local system display.

8. __ Highlight the specified file(s) in either the remote or local machine by clicking on the filename(s) with the left mouse button. Once the files are selected, click left on the Xfr Mode radio button to select either ASCII or Binary mode. Use Ascii for plain text files and Binary for all other files.

9. __ To transfer the file(s), click left on the Copy button in the middle of the FTP window. A Verify Selection window appears as shown below:

Figure 3.2.2.5-5. Verify Selection

10. __ Click left on the OK button to begin the file transfer. A transfer window appears to indicate transfer rate.

11. __ The File Transfer window provides an Abort button to cancel the file transfer. File transfer status displays in the lower portion of the FTP window. Successful file transfer displays the file size transferred in a specified length of time. Errors in transfer are also noted in the lower portion of the FTP window.

12. __ To exit, select Quit from the File pulldown menu in the FTP window.

3.2.2.6 Send_File

The JDISS Send File function allows you to send and receive files from another JDISS system using a point and click window tool. To send a file:

1. __ Double click left on the Send File icon in the Communications window. The Send File Window shown in the Figure below appears.

Figure 3.2.2.6-1. Send File Window

2. __ Select the directory from which to send a file. Choose the file you wish to send from the Files area and click left on the Send File button. The File Type window opens as shown below:

Figure 3.2.2.6-2. File Type Window

3. __ Click left on the Accept button. The File Type window closes and the File Information window appears as shown below:

Figure 3.2.2.6-3. File Information Window

4. __ Click left on Yes in the File Information window. The File Information window closes and the rConnect_popup window appears as shown below:

Figure 3.2.2.6-4. rConnect_popup Window

5. __ Click left once on the hostname receiving the file, then click left on the OK button. The rConnect_popup window closes. At the receiving system the Accept Send File window appears as shown below:

Figure 3.2.2.6-5. Accept Send File Window

6. __ Click left on the YES button to acknowledge to the sender that receipt of the file is acceptable. This enables the receiving site to control the number and size of files on their system.

7. __ The Accept Send File window closes and the Select File window appears as shown below:

Figure 3.2.2.6-6. Send File Window

8. __ Click left on OK, the Select File window closes and the Select Directory opens as shown below:

Figure 3.2.2.6-7. Select Directory

9. __ Select a pathname from the Directories listing on the left side of the window. Click left on the filename to select the file, then click left on OK to receive the file. Once the file is accepted, the sending system receives notification that the file was received.

10. __ Once the file is successfully received, the File Transfer Complete window appears as shown below:

Figure 3.2.2.6-8. File Transfer Complete Window

11. __ Click left on OK to close the File Transfer Complete window. To close the Send File window, click left on the File pulldown menu and select Quit. The Send File window closes.

3.2.2.7 Collage

Collage provides a white board service between JDISS systems.

Initiating a Session

1. __ Double click left on the Collage icon in the Communications window. The Collage window shown in the Figure below appears.

Figure 3.2.2.7-1. Begin Collage Window

2. __ Enter the local hostname and click on OK. The collage main window appears.

Figure 3.2.2.7-2. Collage Main Window

3. __ Click left on the Collaborate pulldown menu and select Begin Session. The following window opens:

Figure 3.2.2.7-3. Begin Session Window

4. __ Enter the local hostname in the Your name area. Enter an unused port number (Example of 7890) in the Server Port Number area. Click on OK.

5. __ An information window opens displaying status. Click on OK to close the window.

Figure 3.2.2.7-4. Collage Infomation Window

6. __ At the distant end, repeat steps 1 and 2. From the Collaborate pulldown menu, select Join Session. The following window appears :

Figure 3.2.2.7-5. Join Session Window

7. __ Enter the local hostname under the Your name area. The Hostname of collage server is the hostname of the session in progress. Server port number is an unused port on the local machine. Click left on OK. The two terminals are now interactively linked.

Sending whiteboard information

1. __ From the Collage main window, click left on the Window pulldown menu and select Whiteboard. The whiteboard opens. If collage is connected between two systems, then the drawings appear at the distant end as they are drawn.

Figure 3.2.2.7-6. Whiteboard Window

2. __ From the Tools pulldown menu in the Collage main window, select Screen Capture. The mouse pointer changes shape. Move the mouse to the corner of the image or screen view to be captured and sent. Diagonally drag the mouse over the entire area to be captured. Release the mouse to end the capture session. A collage window appears with the screen capture / image. If interactively connected, collage also sends a copy to the distant end of the collage session.

3.2.3 DoDIIS Services

The JDISS DoDIIS Services functions allow you to connect to other JDISS systems and various US Government databases on both a national and theater level. The SM controls which systems appear in this window through the JDISS Manager program.

All DoDIIS Services functions are accessed through the DoDIIS Services window. In addition to the customary Motif window decorations, this window contains the standard File, Edit, View, Options, and Help pulldown menus described in Section 3.2.1, and a work area through which all of the DoDIIS Services functions are accessed.

The important thing to note is that while JDISS allows a connection to a particular system, it does not grant access to that system. You must already have a userid and password for the system you wish to access. Additionally, you must know how to use the system once you have established a connection. To connect to a remote Host:

1. __ Double click left on the DoDIIS Services icon on the Desktop window. The DoDIIS Services window shown in the Figure below appears.

Figure 3.2.3-1. DoDIIS Services window

2. __ Select the system you wish to connect to and double click left on it. Depending on the system, a dialog box pops up prompting you for further information. At a minimum you will have to enter a userid and password.

DoDIIS Services also provides the ability to connect to a system that does not appear as an icon in the DoDIIS Services window. To do this, double click left on the Other Host icon. You are prompted for either the name or IP address of the system to which you wish to connect.

3.2.4 Office Tools

Functions Overview

- Applix_WP, described in Section 3.2.4.1, is an introduction to the Applix Words word processor and goes through the basic steps for creating a document.

- Applix_SS, described in Section 3.2.4.2, adds the power of a spreadsheet tool to JDISS in the form of Applix Spreadsheets.

- Graphics, described in Section 3.2.4.3, adds a desktop publishing element to JDISS in the form of CorelDRAW. Graphic objects created here can be imported or exported in a variety of formats.

- CorelDRAW is an optional JDISS product that provides additional graphics capability.

- Interleaf, described in Section 3.2.4.4, provides desktop publishing capabilities for WorldView documents including hyperlinked text.

3.2.4.1 Applix_Word

Applix Words is a What You See Is What You Get (WYSIWYG) word processor with built-in dictionary, thesaurus, and style guides which allow creation of simple memos or complex reports. Although you can use the keyboard for most commands, Words relies heavily on the use of a mouse to

accomplish many of its features. Refer to Appendix A for more details on Graphic User Interface Fundamentals.

The Words Overview:

The following section will familiarize new users with the basic components of Words as illustrated in the Figure below.

Figure 3.2.4.1-1. A Typical Words Window

The Title Bar controls the size and existence of the window, as well as displaying the directory and document name information.

The Menu Bar allows you to display and select editing tasks from pulldown menus.

The Express Line provides you with a shortcut to the menu bar options. You can modify it to suit your work habits.

The Parents Line displays information about the current position of the cursor and the structure of the document.

The Ruler Display helps format the document. It sets position margins, tab stops, and page justification.

The Work Area is where text, or other data incorporated from other applications or windows, is displayed.

The Status Line tracks of the vertical location of the cursor, page position, and status messages indicating the formatting characteristics at the current cursor location.

The Express Line Icons:

The ExpressLine Icons are present in all Applix applications and provide a shortcut to options on the Menu Bar. The Figure below shows the default Express Line Icons for Words:

- - - - - - - - - - -
Save Send Print Cut Copy Paste Delete Bold Italic Underline

Figure 3.2.4.1-2. The Express Line Icons

You can customize the Express Line to suit your work habits. Choose Customize Menu Bar from the Applix menu to do so. If you choose to add a function to the Express Line, and you choose to display it as a "bitmap" (read: icon), you will need to create a bitmap.

To create a bitmap, choose Macro Editor from the Applix menu, then Utilities/Create Bitmap. The guidelines for an icon on the Express Line are width = 23, height = 18.

Style Guides

Style Guides enables concentration on what to say rather than on how the document looks. Style Guides are made up of Templates. When you choose a template, a specific set of form attributes are applied to the text. For example, choosing the Memo style creates a basic memo template that allows you to just "fill in the blanks." The Figure below shows a Memo document before you start typing:

Figure 3.2.4.1-3. Memo Style Guide

You can also create your own Style Guides or modify the ones Applix provides to suit your needs more closely. Styles included with Words are:

Basic - a general purpose template
Letter - a general purpose business letter template
Memo - a basic memo template
Report_Num - creates a numbered section report
Book - for complex documents
Ltr_Basic - an unstructured template for letters
Ltr_Merge - for form letter
Ltr_My_Name - creates a personalized letter
Ltr_Rt_Date - date on the right
Report - a general purpose report template
Outline - creates an outline
Newsletter - a general purpose newsletter template

Some advanced features of Words are not available unless you use style guides. Template selection is available from the File pulldown menu then selecting New.

Creating a new document

1.a __ From the Desktop window double click left on the Office_Tools icon.

2.a __ From the Office_Tools window double click left on the Applix_Word icon.

Or

1.b __ From any open Applix application click left on the Applix (*) pulldown menu.

2.b __ Choose Words from the menu list.

Or

1.c. __ Choose File/New from the menu bar of an open Words window. You will be presented with a Style Guide Template window to select which particular style guide to use. As discussed above, Style Guides allow you to either enter free-form text or work off a template that makes many of your formatting choices for you. For free-form text, choose None.

Saving Your Work

1. __Choose File/Save or File/Save As from the Menu Bar to display the Save As dialog box.

2. __Type a document name in the File Name entry area.

3. __If a document already exists with the name you typed, the Overwrite Existing dialog box will display. Click on Yes to overwrite the existing document, click on No to give your document another name.

4. __To exit a Words document and save it, choose File/Exit to display the Exit dialog box. Click on Save to save your changes, or Abandon if you do not want to save changes.

Converting Word Perfect Documents

Words contains a facility for the conversion of Word Perfect 4.2, 5.0, and 5.1 documents to the Words format. To accomplish this:

1. __ Follow the Quick Start procedures above as though you were going to create a new file.

2. __ Choose Import from the File menu. The Import window shown in the Figure below will open.

Figure 3.2.4.1-4. Import Window

3. __ Use the Directory pop-up and the directory display area to locate and select the source file.

4. __ Once the file is selected, Words should recognize its format and automatically select the correct import file type. If not, use the Import file type area to select "Word Perfect 4.2" for Word Perfect 4.2 files and "Word Perfect 5.0" for Word Perfect 5.0, and "Word Perfect 5.1" for Word Perfect 5.1 files.

5. __ Click left on the Open button to open the file.

Help with Words

While you are working with an Applix application, you might need some help from time to time. Applix provides On-line Help for Menu Bar options and dialog boxes. Help functions in Applix include the following options:

On Context - Changes the mouse pointer to a question mark. The next menu option you choose will display help for that option.

Search - Provides word search capability within the help directory. Enables the user to find help on a particular topic.

On Words - Describes the menu options, icons, display features, and basic editing techniques for using Words.

On Tables - Provides help on using Applix Table Editors.

On Applix Equations - Provides help on using Applix Equations Editors.

Other Applix Help - Provides help on general information, upgraded software information, and a general overview of the other Applix products: Data, ELF, Graphics, Mail, and Spreadsheets.

On Keys - Gives a list of all keys used in Applix.

On Help - Describes the different kinds of help available in Applix.

Tutorial - Runs a tutorial introducing you to the basic features of Applix Words.

On Version - Product version, licensing, and trademark information.

Tutorial Lesson for Words

The Words Tutorial provides detailed procedures for using the many features of Words. It steps you through lessons, complete with examples, on most of the basic knowledge needed to use Words. To run the Tutorial:

1. __ Select Help/Tutorial from the Menu Bar. The list of available lessons appears in the following figure:

Figure 3.2.4.1-5. Words Tutorial Table of Contents

2. __ Click left on your choice of topic.

3. __ Click left on the OK button.

3.2.4.2 Spreadsheets

Spreadsheets is a full-featured application that uses the power of computers to perform many of the tasks performed by the bookkeeper, statistician, scientist, and financial planner. For example, adding numbers, calculating averages, building loan amortization tables and presenting data in a variety of graph formats. You can then insert this data into a Words document or Mail message. Although you can use the keyboard for most commands, it relies heavily on the use of a mouse (an electronic pointing device) to accomplish many of it's features.

Selecting Material with the Mouse

Before any cell operation is performed, the cell must first be selected. Selecting a cell highlights its border; selecting more than one cell highlights the cells in reverse video. There are several ways to select cells in Spreadsheets as shown in Table below.

TO SELECT	DO THIS
Cells	Click left on the cell

Column or Row	Click left on the column or row
Range of Cells	Drag mouse over the entire range of cells
Named Range	Choose Edit / Select / Named Range

Table 3.2.4.2-1. Using the Mouse in Spreadsheets

The Spreadsheets Window

The following section familiarizes new users with the basic components of the Spreadsheets window, which uses the standard Applix GUI as shown in the Figure below.

Figure 3.2.4.2-1. The Spreadsheets Window

The Title Bar controls the size and existence of the window, and displays the directory and document name information.

The Menu Bar contains options used to perform Spreadsheets functions; such as editing text; opening files, displaying graphs, etc.

The Express Line provides a shortcut to the menu bar options. It can be modified to suit specific work needs.

The Entry Area is the location where changes to data are made.

The Work Area is where data is entered, displayed, and manipulated. It is made up of rows and columns. Each column is identified by letter starting with A sequentially through Z. The intersection of each row and column forms a cell. For example, the cell located in the top left corner of the work area is cell A1, the cell below it A2, etc.

The Status Line lists any messages that occur when you use Spreadsheets.

Typing and Editing Data in Spreadsheets

To type data into an empty cell:

Move the cell cursor (the highlighted border that outlines a cell) to the cell desired and begin typing. The characters you type appear in the Entry Area.

When you finish typing, press one of the following keys to enter the data into its cell:

[ENTER]	By default, pressing this key enters the data and moves the cell cursor one cell down.
-	Press the - key to enter the data and move the cell cursor one cell up.
¯	Press the ¯ key to enter the data and move the cell cursor one cell down.

Data you type does not appear in the selected cell until you enter it as defined above. If you change your mind for any reason, pressing the [ESC] key restores the cell's original contents.

To edit existing cell data:

1.a __ Place the cell cursor on the cell you want to edit.

1.b __ Position the mouse pointer on a character in the Entry Area and click left. The edit cursor appears in the Entry Area to the left of the character you clicked on.

Or

2.a __ Place the cell cursor on the cell you want to edit.

2.b __ Begin typing. The characters you type replace the existing entry.

2.c __ When you have finished editing, press the [ENTER], -, or ¯ keys to enter your changes.

Working with Ranges

Spreadsheets lets you perform operations such as deleting, copying, and calculating data on a range of cells. A range is defined as any one cell or block of adjacent cells in the Work Area. For example, the range A1..C1 includes the cells A1, B1, and C1. You can also identify a range by assigning it a descriptive name.

To name a range

1. __ Select the desired range of cells.

2. __ From the Menu Bar choose Ranges/Create Named Range to display the Create Named Range dialog box.

3. __ Type the name of the range in the Range name dialog box.

4. __ Click left on OK.

Using the Ranges menu option, you may also perform the following operations on named ranges:

· Changing a range name - Choose Ranges/Change Named Range to display the Change Named Range dialog box

· Pasting a range name - Choose Ranges/Paste Named Range to display the Paste Named Range dialog box

· Deleting a range name - Choose Ranges/Delete Named Range to display the Delete Named Range dialog box.

Types of Data

Spreadsheets recognize two types of data:

· Values (like numbers, dates, formulas, and built-in functions)

· Labels (text)

Numbers can be entered into a cell in any of the following formats (see Table below):

Format	Example
Integer	1234 or -1234
Decimal	1.234 or -.1234 or 0.1234
Scientific Notation	1.23e+03

Table 3.2.4.2-2. Spreadsheets Number Formats

Dates can be entered into a cell in any of the following formats (see Table below):

Style	Sample Date
mm/dd/yy	12/01/94
mm dd, yyyy	Dec 1, 1995
dd.mm.yy	01.12.95
dd mmm yyyy	01 Dec 1995
month dd, yyyy	December 01, 1995
dd.mm.yyyy	01.12.1995

Table 3.2.4.2-3. Spreadsheets Date Formats

You can change the display style of any date in a spreadsheet using the Style/Numbers option.

Formulas

Formulas are cell entries that calculate new values using existing values. For example, the formula +A1+3 adds the value in cell A1 to the number 3, then displays the result in the cell the formula is entered. An Applix formula always begins with a plus sign (+). The plus sign alerts Applix that what follows the plus sign makes up a formula.

Labels

A label is any entry in a spreadsheet that Applix does not interpret as a value or cell status message. Labels cannot be calculated. As shown in the Figure below, labels usually take the form of descriptive text that identify parts of a spreadsheet.

Figure 3.2.4.2-2. Spreadsheets Labels

Creating a new spreadsheet

1.a __ From the Desktop window double click left on the Office_Tools icon.

1.b __ From the Office_Tools window double click left on the Applix_Spreadsheet icon.

Or

2.a __ From any open Applix application (see the Applix Applications Menu in the Figure below) click left on the Applix icon.

2.b __ Choose Spreadsheets from the menu list.

Or

3.a __ Choose File/New from the menu bar of an open Spreadsheets window.

Reverting a Document

If you decide you do not like any of the changes you have made to a document since you last saved it, you can discard your changes in one operation by reverting to the previously saved version.
To revert a document:

1. __ Choose File/Revert to display the Revert dialog box.

2. __ Click left on Discard Edits.

Alternatively, you can choose Abandon from the Exit dialog box when quitting Spreadsheets (see below).

Saving a Spreadsheet

To save a spreadsheet for the first time:

1. __ Choose File/Save or File/Save As from the Menu Bar to display the Save As dialog box.

2. __ Type a document name in the File name entry area.

3. __ Click left on Binary Format if you have a large spreadsheet. Spreadsheets saved in binary format open faster and update other Spreadsheets with links faster.

4. __ If a document already exists with the name selected, the Overwrite Existing dialog box will display. Click on Yes to overwrite the existing document, click on No to give your document another name.

5. __ To exit a spreadsheet and save it, choose File/Exit to display the Exit dialog box. Click on Save to save your changes, or Abandon if you do not want to save.

Tutorial Lessons for Spreadsheets

1. __ Select Help/Tutorial from the Menu Bar. The figure below appears with a list of available lessons.

Figure 3.2.4.2-3. Spreadsheets Tutorial Table of Contents

2. __ Click left on the topic of your choice.

3.2.4.3 CorelDRAW

CorelDRAW Version 3.0 provides graphics creation along with the ability to import and export graphic formats. CorelDRAW supports a wide variety of graphic formats, text fonts, and printers.

Integration of CorelDRAW graphics into wordprocessing applications may require several minutes. CorelDRAW is an optional JDISS product.

3.2.4.4 Interleaf

Interleaf accesses WorldView documents, which includes the use of hyperlinked text. The documents form a collection of linked texts designed to make searching or browsing easier.

1. __ From the Office Tools desktop, double click on the Interleaf icon. The WorldView window opens. Once a collection is created, it may be loaded and manipulated from the File pulldown menu.

Figure 3.2.4.4-1. Interleaf Window

3.2.4.5 Applix Graphics

Applix graphics is an integrated Applix product that creates, imports, and exports a variety of graphic formats. Integration seamlessly places graphics into the word processor, as well as, creates graphics from spreadsheet data.

1. __ From the Office Tools desktop, double click on the Applix Graphics icon. The Applix graphic window opens.

Figure 3.2.4.5-1. Applix Graphics Window

Creating a Graphic

1. __ Click left on the desired tool from the tool bar. If selecting a rectangle or similar basic geometric shape, click and drag the mouse pointer until the desired size is reached.

2. __ To fill in a desired region with color, click on the object to select it (square selection blocks appear around the object shape). Click left on the color bar to select the desired color. Pattern shapes for filling in an area are chosen from the fill area pulldown menus located directly beneath the tool bar.

Saving a Graphic

1. __ From the File pulldown menu in the Applix graphics window, select Save as. The Save as window opens.

2. __ Specify a pathname from the Directory pulldown menu. Set permissions for the graphic. Click left on Save. The Save as window closes.

Importing a Graphic

1. __ From the File pulldown menu, select Import. The Import window opens.

Figure 3.2.4.5-2. Applix Graphic Import Window.

2. __ From the Directory pulldown menu, select the path to the file to be imported. Click left to highlight the filename and select the graphic format from the Import File Type area. Click left on Open. Applix graphics displays the imported file. Example: Figure 3.2.4.5-1.

Using Applix Clipboard

1. __ Select the graphic to be placed on the clipboard by clicking left and dragging the mouse around the graphic. Once selected, click left on the Applix paste-to-clipboard icon in the Express Line area.

2. __ Open the Applix word processor, click left on the take-from-clipboard icon in the Express Line area to place the graphic into the word processor.

Printing a graphic

1. __ From the File pulldown menu, select Print. The Print window opens. Specify the number of copies and page range. Click left on the printer name to select the printer. Click left on OK when ready.

Tutorial Lessons for Graphics

1. __ Select Help/Tutorial from the Menu Bar. The Tutorial window opens listing topics available.

2. __ Click left on the topic of your choice.

3.2.5 Images

Images provides the capability to accept and gather various imagery formats for display and manipulation. ELT provides users the ability to manipulate, format, and print an image. Imagine is an optional package for JDISS. JUIC is a Mosaic Document Viewer. Digital_Camera inputs still photographic images into JDISS for manipulation and analysis. Hippi provides an interface for SCSI and GPIB printing and scanning.

3.2.5.1 ELT (Electronic Light Table)

JDISS uses Paragon Imaging's Electronic Light Table (ELT/2) to view and manipulate images. With ELT/2 you can sharpen, blur, transpose, rotate, and invert an image or selective region of interest, apply overlays and annotations, and extract sub-images. Images can be saved in TIFF and NITF data format for use with other image processing packages. ELT/2 can also support the TACO2 protocol, scanners and video frame grabbers. The Figure below shows the basic ELT/2 window.

Figure 3.2.5.1-1. ELT/2 window

The Express Line

The express line within ELT changes functions based on palette selection. The status line indicates the palette chosen; Draw Palette, Text Palette, or ROI (Region of Interest) Palette. The status line also indicates the function of the express buttons by moving the mouse over the specific mouse button. The three type of express line palettes are shown below:

Figure 3.2.5.1-2. Text Palette Express Line

Figure 3.2.5.1-3. Draw Palette Express Line

Figure 3.2.5.1-4. ROI Palette Express Line

Using the Mouse in ELT/2

In ELT/2, both the left and right mouse buttons perform functions. The right mouse button pops up sub-image notes when you click on a sub-image. The mouse cursor changes shape from time to time as shown in the table below:

?

This is the normal cursor shape when over the image in the main window. The center dot is the "hot" pixel and its value and location are reported at the bottom of the main window.

This compass shape tells you the cursor is over an overlay graphic and you may select it by clicking or move it by dragging.

This shape appears when you have selected an overlay or Region of Interest drawing tool and are in the act of drawing the object.

This shape appears when you pick the Zoom with Mouse command from the Zoom menu.

Table 3.2.5.1-1. ELT/2 Cursor Shapes

Selecting Objects

When the cursor changes to the compass shape, click left on an object to select that object. The selected object changes color.

Dragging Objects

Objects are moved with the mouse by dragging them; as explained below:

1. __ Move the mouse over the object. This includes ELT/2 overlay graphics and sliders on some dialog boxes and secondary windows.

2. __ Press and hold the left mouse button. When this is done over an ELT/2 overlay graphic, an outline of the object appears.

3. __ Move the mouse while still pressing the left mouse button. This drags the object.

When you have dragged the object into position release the mouse button.

Loading Images

The ELT/2 can load as many images as permitted by the workstation's memory.

Figure 3.2.5.1-5. ELT/2 Load Image File Browser

1. __ Select Load from the File menuor express line. The Load Dialog Box (shown above) appears. This window finds or browses through the directory structure and selects the image to load.

2. __ Choose the image file to load by double clicking on the desired image name or click once to highlight the file name then click on the Load button. The image file will be loaded into the ELT/2 and displayed in the main window.

3. __ When the ELT/2 has loaded at least one image, all the menu items become available.

Capturing Images from a Scanner

1. __ Scanning images into ELT is performed through hippi. Refer to Section 3.2.5.5 of this manual for details on scanning in images.

Image Processing

Once an image is loaded it can be modified. This section describes basic image processing functions.

The Enhance Menu

The Enhance menu contains all of the image processing functions built into ELT/2. The Enhance menu itself is divided into sections. Near the bottom of the pulldown is the section of Image Processing, Edge Detection, and Flip / Rotate functions. These titles have arrows pointing right indicating there are sub-menus (cascade menus) associated with each one. To select an Enhance function:

1. __ Click the Enhance menu title on the main menu bar.

2. __ Click left on the Image Processing title on the Enhance menu. This pulls down another menu with a number of enhancement functions. Alternatively, click left on the Enhance pulldown menu and select Library Menu.

Figure 3.2.5.1-6. Library Menu Window

3. __ Click the left mouse button on the Stretch Contrast button. The pixels within the image alter the images presentation.

This is how image processing functions are done in the ELT/2. Select other image processing functions and see what they do. You can always reload the image (see Restore Image on the File menu) if you do not like the results.

The Window Menu

The Window menu contains a list of all the images loaded into ELT/2. To change to another image that is loaded:

1. __ Pulldown the Window menu.

2. __ Select the image by picking its name with the left mouse button (or releasing the mouse over the image's name).

3. __ The selected image is displayed in the main window after a few moments. This is the new "current image".

The Image Gallery

Another way to change or flip between images is to select the image from the Gallery (Tools menu). The Gallery is a separate window that contains miniatures of all the images loaded into the ELT/2. Simply click the left mouse button over a miniature in the Gallery to display that image in the main window. Whenever an image processing function is run on the current image, its miniature will also be updated.

Saving an Image

Once you have the image enhanced or modified, it can be saved to its original file or to a new name to preserve the original:

1. __ Select Save As from the File pulldown menu. The ELT/2 Save window appears as shown in the Figure below:

Figure 3.2.5.1-7. ELT/2 Save Window

2. __ Enter the image's name in the Filename field. Or choose the image's original name to

replace the image.

3. __ Choose a format from the Format drop-down list. Section 5.2 of the Appendix lists a few of the more common image formats.

4. __ Pick the Save button to write a copy of the image to disk. If you have changed the image's name, its name will also change in the main window's title bar, in the Image menu, and in the Gallery.

The Overlay Palette

ELT/2 gives a variety of drawing tools and colors for use in annotations. The overlay palette displays in the bottom portion of the express line when the Draw Palette express icon is selected. Click left on the Draw Palette express icon to display the overlay palette.

Adding Text to an Image

1. __ Select Text Palette express icon. The express line for the overlay palette displays.

2. __ Click the left mouse button on a desired color from the pulldown menu for both the text color and background color.

3. __ Click left on the font pulldown menu in the express line and select a desired font.

4. __ Click the left mouse button on the Insert Text express icon. The mouse shape within the image changes from the pointing arrow to the text insertion cursor.

5. __ Move the mouse over the image and click the left mouse button where the text is to appear. Type a message.

Drawing Tools. The drawing tools (with the exception of the selection tool) are affected by the currently selected color and line thickness. Make sure these are set before drawing.

· Selection Tool. The selection tool picks overlay objects. Objects are selected for other operations such as moving them, deleting them, and aligning them with each other. The selected object is identified by selection boxes encompassing the overlay. The status line indicates whether or not an object is selected.

· Line Tool. The line tool draws straight lines. Move the mouse to the start point, press and hold the left mouse button, drag the line to the end point and release the mouse.

· Rectangle Tool. The rectangle tool draws rectangles. Move the mouse to one corner of the rectangle . Press and hold the left mouse button and drag out a rectangle to the opposite corner and release the mouse.

· Oval Tool. The oval tool draws ovals. Move the mouse to the start point of the oval. Then press and hold the left mouse button and drag out an oval. Release the mouse button when the oval is completed.

· Pencil Tool. The pencil tool draws freehand lines. The first and last points of the pencil automatically connect if the Closed Pencil toggle button is selected. Draw a pencil line by pressing the left mouse button and dragging the mouse. A line will follow the mouse. Release

the mouse when the pencil line is completed.

· Circle Tool. The circle tool draws circles from the center out. Place the mouse at the center of the circle. Press and hold the left mouse button and drag out a circle. Release the mouse button when the circle is completed.

Changing Overlay Graphics

Once placed, an overlay graphic can change its color, and where appropriate, its fill and line thickness with the following steps:

1. __ Click left on the selection tool.

2. __ Move the mouse over the main image until it is on top of the object to change. Wait for the cursor to change to the compass shape and click the left mouse button.

3. __ Repeat step 2 for as many objects as need change. You can also select objects from the Edit menu: Pick Select All if all overlay graphics are to be selected. Pick a choice from the Other Selections sub-menu when you want to select all the objects of a specific type (such as all lines or all text).

4. __ Click the left mouse button on the item in the Overlay Palette you want to change. For example:

   · Click left on a new (or the same) color button or line thickness to change those attributes.

   · Click left on Close Pencil to close all open and selected pencils.

   · Click Fill to fill the selected objects (will place a background on text).

   · Select a new text size to change selected text objects.

Printing Overlay Graphics

If using the NITF version 1.1 protocol, a warning dialog box appears noting that overlays cannot be saved in .nitf protocol. NITF version 2.0 accepts both color and overlays.

Regions of Interest

Region of Interest (ROI or ROIs) selects a portion of the image and processes it as if it were a separate image. All of the built-in image processing functions work on ROIs. ROIs are created with the ROI Palette from the Express Line. Refer to Figure 3.2.5.1-4.

1. __ Click on the ROI icon from the Express Line, and select a drawing tool. Use the drawing tool select a portion of the image to convert to a ROI.

2. __ Click on Show Information from the ROI Palette Express Line to display histogram information.

Figure 3.2.5.1-8. ROI Information Window.

· Defining a Region Of Interest. Define a ROI by selecting the shape and drawing it over the image just as you would draw a rectangle, pencil, or polygon overlay. When you release the mouse the ROI outline is added to the image. A histogram and statistics for the ROI are generated. The ROI is also given a number as its name and it is put into the list on the ROI Palette. The ROI is also automatically selected. When the next ROI is drawn, it will be highlighted and the last ROI drawn will not.

· Processing a Region of Interest. Once a ROI is drawn, process it as the entire image. Since at least one ROI is selected, the processing happens immediately on the ROI. Its histogram and statistics will be recalculated once the function has been completed and the new ROI image data will be inserted back into the image (you might want to make a copy of the entire image before processing it).

· Selecting Regions of Interest. Select one or more Regions of Interest for processing:

1. __ Pick the selection tool (on either the Overlay or ROI Palette). Move the mouse over a ROI and click the left mouse button.

2. __ Click the left mouse button over a ROI's name in the list on the ROI Palette. Or, drag the mouse over the list of names and select a number of names at once. You can also select one name, then <Shift>-click the left mouse button on another name and all the names in between will be selected.

Printing an Image

1. __ From the File pulldown menu, select ImagePRINT. The ELT Printer List appears listing the available printers for selection. Click left to select the specific printer, then click left on OK.

Figure 3.2.5.1-9. ELT Printer List Window.

2. __ Once the printer is selected, the printer setup window opens. Specify printer parameters, then click on OK.

Figure 3.2.5.1-10. ELT Printer Setup Window.

3.2.5.2 Imagine

Imagine by ERDAS is an optional JDISS package that analyzes or creates graphical models for mapping application, often incorporating information from the GIS (Geographic Information Systems) database.

3.2.5.3 JUIC (Joint Universal Imagery Client)

JUIC (Joint Universal Imagery Client) is a MOSAIC document viewer which currently accesses the 5D imagery server.

Accessing JUIC:

1. __ From the Images Desktop, double click left on the JUIC icon. A Mosaic interface for JUIC opens. Mosaic provides a hyperlinked text capabiltiy; i.e., clicking on the color text retrieves more detailed information about the chosen phrase or concept.

Figure 3.2.5.3-1. JUIC Window.

2. __ JUIC lists several Home Pages that access various imagery servers. Home Pages are the graphical respresentation of an imagery server. Clicking on the Home Page of JDISS provides additional information concerning JDISS functions, support, POC's, and current events.

3.2.5.4 Digital Camera

Digital Camera provides an interface for acquiring images from the DCS 200 camera.

Initializing the DCS 200 Camera:

1. __ From system halt, boot the system without the camera attached. Once logged into the system attach the camera to the SCSI chain with the physical address set to 5. Ensure the camera is ON.

2. __ From the Images Desktop, double click on the Digital_Camera icon while simultaneously depressing the shutter release button on the camera. A green light on top of the camera lights indicating camera activation. A dialog box appears stating Connect Camera. Continue pressing the shutter release button. The Kodak DCS 200 Digital Camera window opens and the DCS 200 camera begins unloading images.

Figure 3.2.5.4-1. Kodak DCS 200 Digital Camera Window.

Acquiring an Image:

1. __ From the Kodak DCS 200 window select the image desired, then click left on Acquire in the Action: area in the lower right corner of the window.

2. __ In the Selection box area of the window that opens, enter the path and name of the TIFF

image to be saved.

Figure 3.2.5.4-2. DCS 200 File Selection Window.

3.2.5.5 Hippi

Hippi (HiPPIE - High Performance Peripheral and Imaging Enablers) provides an interface to ScanShop which enables images to be scanned into the system in various resolutions and manipulated. Hippi also provides a SCSI printer interface.

Scanning in an Image:

1. __ From the applications desktop, double click left on the Images icon. The Images window opens.

2. __ From the Images window, double click left on the hippi icon. The ScanShop window opens as seen below:

Figure 3.2.5.5-1. ScanShop Main Window.

3. __ Click on the Scan pulldown menu and select Scan to open the Scanning window. Specify parameters and click on OK.

Printing an Image

1. __ Click on the Print pulldown menu and select Print. The printer window opens. Specify parameters and click left on OK.

Figure 3.2.2.5-2. ScanShop Print Control Window

Saving an Image

1. __ Click on the File pulldown menu and select Save As. The Save Image window opens.

Figure 3.2.5.5-3. Save Image Window.

2. __ Select the directory path where the file is saved from the left side of the window. Click left on the Format pulldown menu to select a file format. Enter the filename in the Selection box area near the bottom of the window. Click left on OK.

3.2.6 Utilities

The Utilities functions provide a wide-range of convenient tools in a single window.

- Backup and Restore, described in Section 3.2.6.1, provides a routine for users to backup their personal files.

- Calculator, as described in Section 3.2.6.2, provides a scientific calculator from X.desktop. Calendar also provides an address book.

- Calendar, as described in Section 3.2.6.3, provides a calendar both on-screen and in hard copy format that is capable of inserting appointments and providing notification for personal and shared events.

- Clipboard, described in Section 3.2.6.4, allows cutting and pasting text between applications.

- Clock, as described in Section 3.2.6.5, provides both system and local time in either digital or analog format via X.desktop.

- DOS Tools, described in Section 3.2.6.6, provides a facility for formatting a high-density floppy disk as a DOS diskette, as well as, importing and exporting files between the system hard disk drive and a DOS formatted diskette. DOS Tools also provides the capability to delete files from a floppy disk and eject the diskette from the system.

- Shutdown, as described in Section 3.2.6.7, describes an orderly, safe method for shutting down system software.

- Print_Screen, described in Section 3.2.6.8, provides a routine that prints a hard copy of your system display.

- System_Load, described in Section 3.2.6.9, provides a tool for monitoring system resources.

- Save_Screen, described in Section 3.2.6.10, provides a routine that saves an image of your system display.

- CDROM, as described in Section 3.2.6.11, provides users a method for accessing the CDROM drive.

- Time Zone Clock, as described in Section 3.2.6.12, displays a world clock with day and night time zones.

- Video Pix, as described in Section 3.2.6.13, provides a frame grab of images from a VCR format.

- Soft Windows, as described in Section 3.2.6.14, provides a DOS interface.

- Disk Usage, as described in Section 3.2.6.15, shows available disk space on the system.

- Project Manager is an optional JDISS package as noted in Section 3.2.6.16.

- Set Password enables the user to change his or her personal password as listed in Section 3.2.6.17.

All Utilities functions are accessed through the Utilities window shown in the Figure below. In addition to the customary Motif window decorations, this window contains the standard pulldown

menus described in Section 3.2.1, and a work area through which all of the Utilities functions are accessed.

Figure 3.2.6-1. Utilities Window

The Utilities functions are accessed by double clicking left on the appropriate Work Area icon.

3.2.6.1 Backup and Restore

The system provides a means to backup and restore both your home and shared directories. This should be done on a periodic basis.

JDISS performs a level 0 dump of the entire system, encompassing all files that have changed since the last backup. A level 0 dump copies the entire filesystem to tape. Perform a level 0 dump periodically to safeguard against system failure and prior to any significant change to you system. A level 0 dump takes approximately one hour depending on how much data is stored on the disk.

1. __ From the desktop window, double click on Utilities with the left mouse button. This opens the Utilities window.

2. __ Move the pointer to the Backup & Restore icon in the Utilities window and double click on the left mouse button. The Storage & Retrieval window appears as shown below:

Figure 3.2.6.1-1. Storage & Retrieval Window

3. __ Click left on the Quick Change listing on the left side of the Storage and Retrieval window under the Hard Disk heading. The pulldown menu displays the list of accessible directories for both the specific user directory as well as the shared directory. Click on the left mouse button and drag the pointer to the desired directory.

The directory contents are listed.

4. __ Scroll through the directory contents to select the desired files. Click left on the filename

to select the file(s).

5. __ On the right side of the Storage & Retrieval window under the Tape heading appears a list of devices that the system may use for storage. Click on the radio button

with the left mouse to select the desired storage device.

6. __ Once the file(s) and storage device are selected, click on Backup in the center of the Storage & Retrieval screen with the left mouse. The system will place a copy of the file(s) on the selected device. The button portion of the Storage & Retrieval

window displays system messages.

3.2.6.2 Calculator

The system provides a pop-up scientific calculator for your convenience. To display the calculator:

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Move the pointer to the Calculator icon in the Utilities window and double click left. This launches the Calculator.

Figure 3.2.6.2-1. Calculator

3. __ To close the Calculator window, move the cursor to the Calculator window's System Menu button in the upper left corner, click left to pop-up the System Menu, move the cursor to the Close menu item, and click left. The Calculator window closes.

4. __ To return to the X.desktop (<System_Name>) window, move the cursor to the Utilities window's System Menu button, click left to pop-up the System Menu, move the cursor to the Close menu item, and click left. The Utilities window closes.

3.2.6.3 Calendar

To display the calendar

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Move the pointer to the Calendar icon in the Utilities window and double click left. This launches the Calendar by Synchronize.

Figure 3.2.6.3-1. Calendar

3. __ Click on the left mouse button on a particular date to display the Day-at-a-Time calendar.

Figure 3.2.6.3-2. Day-at-a-Time Window

4. __ The calendar inserts appointments for both personal and shared accounts.

5. __ Click left on the File pulldown menu and select Address Book to open the Address Book as shown below.

Figure 3.2.6.3-3. Address Book Window

6. __ To close the Calendar window, move the cursor to the Calendar window's System Menu button, click left to pop-up the System Menu, move the cursor to the Close menu item, and click left. The Calendar window closes.

7. __ To return to the X.desktop (<System_Name>) window, move the cursor to the Utilities window's System Menu button, click left to pop-up the System Menu, move the cursor to the Close menu item, and click left. The Utilities window closes.

3.2.6.4 Clipboard

The clipboard is a temporary "holding pen" for text-only material copied from applications like Applix Words. It edits copied text prior to pasting it into the destination document.

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Move the pointer to the Clipboard icon in the Utilities window and double click left to open it.

Figure 3.2.6.4-1. Clipboard Window

· In Words, click and drag to highlight a block of text, then click left on the Edit pulldown menu and select Copy. The text appears in the clipboard window.

3. __ You can now edit the text.

4. __ Go to the destination document and paste the text.

5. __ Click left on Quit in the xclipboard window to close the window.

3.2.6.5 Clock

X.desktop clock displays the system time as well as various other time zones in either a digital or analog format.

To display the system clock:

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Move the pointer to the Clock icon in the Utilities window and double click left. This displays the system time.

To display a world time zone map:

1. __ Click and hold down the right mouse button in the center of the system time clock. A pulldown menu appears. Click and drag the right mouse to World Map. The world time zones display as shown below:

Figure 3.2.6.5-1. X.desktop World Clock

To display a series of clocks for different time zones:

1. __ Click and hold down the right mouse button in the center of the system time clock. A pulldown menu appears. Click and drag the right mouse to Clock Bank. Another Clock window appears. From the File pulldown menu click on the left mouse button to Select Time zones. A window listing various time zones appears. Click on the desired time zone with the left mouse button to highlight the time zone name, and then click on OK from the bottom of the window; or double click with the left mouse button on the desired time zone. The Clock window adds another display screen in the window along with previously selected time zones. Click on the new time zone radio button to select the new time zone display. To display the time for the new time zone, click on the Edit pulldown menu with the left mouse and specify whether the new time zone clock should be analog or digital.

Click on the File pulldown menu with the left mouse and select Close to close both the Clock Bank window and the World Map window.

To close the main Clock window, click and hold the right mouse in the center of the screen. Drag the pointer to Exit.

3.2.6.6 DOS Tools

Figure 3.2.6.6-1. DOS Utility Floppy Window

If you have not inserted a DOS formatted, write enabled, floppy into the disk drive, the system will pop-up an Error window as shown below:

Figure 3.2.6.6-2. Floppy Disk Warning Window

Click left on OK to acknowledge the warning. A second warning window appears as shown below:

Figure 3.2.6.6-3. Floppy Disk Error Window

Click left on OK to acknowledge the warning.

DOS_Format

The system allows you to DOS format 3.5 inch high-density floppy disks.

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Move the pointer to the DOS_Tools icon in the Utilities window and double click left. The DOS Utility window opens.

3. __ From the right side of the window, click left on the Floppy pulldown menu. Click left on Format Floppy to begin formatting. A format confirmation window appears.

Figure 3.2.6.6-4. Format Confirmation Window

4. __ Click left on Yes. The format status appears in the lower portion of the DOS Utility window:

   Formatting drive "A:"

5. __ To clear the status window, click left on the File pulldown menu and select Clear Stats window. The status window clears.

DOS_Import

The system allows you to import data from IBM compatible personal computers via DOS formatted floppy disks to selected directories. To import data from a DOS disk:

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Move the pointer to the DOS_Tools icon in the Utilities window and double click left. This opens the DOS Utility window.

3. __ From the left side of the window, click left on the Disk pulldown menu. Select the directory where the imported file will be placed. A listing of the files in that directory appears in the right column under the heading Hard Disk.

4. __ From the right side of the window, a listing of the contents of the floppy disk appears in the right column under the Floppy heading. Double click left to highlight the filename to import.

5. __ The center section of the window activates. Click left on << Copy << to import. The lower portion of the window lists the import status along with the pathname where the file is located on the hard disk. When complete, the filename appears under the Hard Disk heading on the left side of the window.

6. __ To clear the status window, click left on the File pulldown menu and select Clear Stats window. The status window clears.

DOS_Export

The system provides facility for exporting data from the selected directories to DOS formatted floppy disks for transfer to an IBM compatible personal computer. To export data to a DOS disk:

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Move the pointer to the DOS_Tools icon in the Utilities window and double click left. This opens the DOS Utility window.

3. __ From the left side of the window, click left on the Disk pulldown menu. Select the directory where the exported file resides. A listing of the files in that directory appears in the right column under the heading Hard Disk.

4. __ Scroll through the file listing and double click left to select the exported file.

5. __ The center section of the window activates. Click left on >> Copy >> to import. The lower portion of the window lists the export status along with the pathname where the file is located on the hard disk. When complete the filename appears on the right side of the window under the Floppy heading.

6. __ To clear the status window, click left on the File pulldown menu and select Clear Stats window. The status window clears.

DOS_Delete

The system allows you to delete files from DOS formatted 3.5 inch high-density floppy disks.

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Move the pointer to the DOS_Tools icon in the Utilities window and double click left. This opens the DOS Utility window.

3. __ From the right side of the window, under the Floppy heading, double click left to highlight the filename for deletion.

4. __ From the Floppy pulldown menu, click left of Erase Selected. A deletion confirmation window appears:

Figure 3.2.6.6-5. Deletion Confirmation Window

5. __ Click left on Yes to delete. The status window notes the file removal. The filename disappears from the file listing under the Floppy heading .

6. __ To clear the status window, click left on the File pulldown menu and select Clear

DOS Eject

The system allows you to manually eject 3.5 inch high-density floppy disks.

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Move the pointer to the DOS_Tools icon in the Utilities window and double click left. This opens the DOS Utility window.

3. __ Click left on the Floppy pulldown menu on the right side of the window, click left to select Eject.

3.2.6.7 Shutdown

The system provides a means for shutting down the system software prior to shutting off power to the system hardware components. To shut down the system:

1. __ Move the pointer to the Shut_Down icon in the X.desktop (<System_Name>) window and double click left. This immediately shutdowns down the system software in a clean manner. Network connectivity terminates when the following displays:

>b to boot, c to continue, n for new command mode

3.2.6.8 Print Screen

You can print a hard copy of your display. To route a screen image to the printer:

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Arrange the windows on your screen so that the window of interest is prominently displayed.

3. __ Move the pointer to the Print_Screen icon in the Utilities window and double click left. The pointer will change shape to a 90 degree angled bracket. Click left and drag the pointer over the area to be sent to the printer. Releasing the pointer sends the specified area snapshot to the printer. A bit map (filename in a .xwd format) of the current screen image will be routed to the local print queue.

4. __ To return to the X.desktop (<System_Name>) window, move the cursor to the Utilities File pulldown menu and click left on Close This Window. The Utilities window will close.

3.2.6.9 System Load

The system provides a tool for monitoring system CPU (Central Processing Unit) usage. To display the System_Load graph:

1. __Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __Double click left on the System_Load icon. The xload window will appear. The horizontal bar displays time while the vertical bar shows system load.

Figure 3.2.6.9-1. System Load Graph

3. __To close the window, move the cursor to the window's System Menu button, click left to pop-up the System Menu, move the cursor to the Close menu item, and click left. The window closes.

4. __To return to the X.desktop (<System_Name>) window, move the cursor to the Utilities window's System Menu button, click left to pop-up the System Menu, move the cursor to the Close menu item, and click left. The Utilities window closes.

3.2.6.10 Save Screen

You can save an image of your current display in a file in your home directory. To route a screen image to a file:

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Arrange the windows on your screen so that the window of interest is prominently displayed.

3. __ Move the pointer to the Save_Screen icon in the Utilities window and double click left. The system will open a window which will prompt you to enter a filename. Enter a legal filename for your screen grab.

Figure 3.2.6.10-1. Save Screen Window

4. __ A bit map of the current screen image will be saved in the file name of your choice to the home directory.

3.2.6.11 CDROM

The CDROM utility enables the user to access files via the compact disk drive.

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Double click left on the CDROM Mount icon. A dialog window indicates if the CDROM is mounted successfully.

3. __ To remove the CDROM, double click left on the CDROM Eject icon.

3.2.6.12 Time Zone Clock

The system provides a graphic clock that shows the areas of the world currently in daylight and in darkness, as well as digital and analog clocks. To display one of the Clocks:

1. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Move the pointer to the desired Time_Zone_Clock icon in the Utilities window and double click left. This opens the world map of time zones via the Sun OS.

Figure 3.2.6.12-1. Sunclock Window

3. __ To close the window, move the cursor to the window's System Menu button, click left to pop-up the System Menu, move the cursor to the Close menu item, and click left. The sunclock window will close.

3.2.6.13 Video Pix

Video Pix is a hardware and software interface that accepts image inputs in a frame grab format in either PAL, NSTC, or S-video signals. The input may be either black-and-white or color. Once the image is either loaded from file or frame grabbed, the image may be saved to a specified directory in a variety of formats including .tif. In order to grab a video frame, the VideoPix hardware must be installed.

Framegrabbing

1. __ From the Utilities window, double click on the VideoPix icon. Two windows open; the Image Display window, and the VfcTool window.

Figure 3.2.6.13-1. VideoPix Window

2. __ From the VfcTool window, left click on the Preview button. Video displays in a frame format. Left click on the Grab button to freeze a frame.

Changing Display Mode

1. __ Click on the B&W or Color button in the VfcTool window to show the video in either black and white or color

Saving a Frame

1. __ Once a frame is grabbed, click right on the File pulldown menu and select Save as. The File Save window opens.

2. __ Click left to select the File Type: and Image Format:. Enter the Directory: and File: pathname.

3. __ Click left on Save.

3.2.6.14 Soft Windows

Soft Windows is an optional JDISS packages that provides a DOS interface for PC's.

3.2.6.15 Disk Stats

Disk Stats details the amount of disk space used on the system.

1.. __ Move the pointer to the Utilities icon in the X.desktop (<System_Name>) window and double click left. This opens the Utilities window.

2. __ Double click left on the Disk Stats icon. The Disk Usage Interface window opens.

Figure 3.2.6.15-1. Disk Usage Interface Window

3.2.6.16 Project Manager

Project Manager is an optional JDISS package.

3.2.6.17 Set Password

1. __ From the Utilities window, double click left on the Set Password icon. Enter a new password in the window that appears.

2. __ A Verify Password opens. Re-enter the new password to confirm the type entry.

3.2.7 E-Mail

JDISS E-Mail is provided by the Applix Mail COTS package. Mail seamlessly integrates with the full suite of Applix office applications - Words, Graphics, and Spreadsheets. With Mail, you can send and receive mail messages, documents, files, and faxes. Although you can use the keyboard for most commands, it relies heavily on the use of a mouse (an electronic pointing device) to accomplish many of its features.

3.2.7.1 Personal Mail

1. __ From the Desktop double click left on the Personal_Email icon. The Email Desktop window appears. The personal mail inbox window appears.

Figure 3.2.7.1-1. Personal Mail Inbox Window

The Inbox Dialog Window

The Inbox Dialog window displays the messages you have received. In the Inbox, you read and work with mail messages.

The Title Bar controls the size and existence of the window, and displays the directory and document name information.

The Menu Bar contains options you use to perform mail functions, such as editing text; opening files, etc.

The Express Line provides you with a shortcut to the menu bar options. It can be modified to suit individual work habits.

The Folder List contains the list of available folders. Folders are useful for organizing mail messages. It contains the default Mail, Outbox, and Wastebasket folders and any created using the Folder menu options.

The Message area lists mail messages. Messages are listed or viewed according to selections made under the View pulldown menu.

The Text area contains the actual mail message text. To display header information along with the message text, click left on the View pulldown menu and select Display Envelope.

The Attachment area lists mail attachments. Icon shape details file format.

Reading a Message

1. __ To select a message double click left on the message in the message list area of the inbox.

Figure 3.2.7.1-2. Mail Message Attachment Window

Viewing Attachments

If any of your mail messages have attachments, you may view them by doing the following:

1. __ Attachments in an Applix format (.as, .ag, or .aw) or non-Applix formats that Applix can import will automatically display by double clicking left on the attachment icon. Other formats, such as image formats (.pidf, .ntf, .tiff), need saved and then manually loaded into the appropriate application to view the attachment. An error will display if the format is unrecognizable by Applix:

Figure 3.2.7.1-3. Image Attachment Error Window

2. __ To save the attachment, click left to highlight the filename of the attachment. Click left on the File pulldown menu and select Save As. The Save As menu opens.

The Send Mail Dialog Window

The Send Mail Dialog Window is used to send messages, attach files, and select send options.

Figure 3.2.7.1-4. Send Mail Window

The Title Bar controls the size and existence of the window, and displays the directory and document name information.

The Menu Bar contains options you use to perform mail functions, such as editing text; opening files, etc.

The Express Line provides you with a shortcut to the menu bar options. It can be modified it to suit individual work habits.

The Address Area lists where mail is sent via username@hostname format.

The Message Area provides space for typing mail messages.

The Status Icons detail options for sending mail.

Sending a Message in Applix Mail

1. __ From the Desktop double click left on the Personal_Email icon. The personal mail inbox window appears. Click left on the Send pulldown menu and select Mail, or click left on the sendmail icon from the Express Line.

2. __ The Send Mail window appears. Click on the To radio button.

3. __ Type your intended recipient's name in the Name entrybox, or find the name in the personal or global list and double click on it (or click once to highlight the name, then click Add or press [Return]). For multiple addresses, continue to add names. For Cc (Courtesy Copy) recipients, click on the Cc button first, then add names. For Bc (Blind Copy) recipients (recipients who will be unaware anyone else has received this message), click first on the Bc button, then add the name.

4. __ Click left in the Subject box and enter a subject.

5. __ Click left in the Message box and type the text of the message. As you type, the text wraps within the Message box. To create a new paragraph, press [Enter].

6. __ To add an attachment, click on Attachments/Files on the Menu Bar, or click on the Attachments icon (the paper clip) on the Express Line. Use the Directory Browser to find and select your file(s).

7. __ Click left on OK to send the message and close the Send Mail dialog box.

Tutorial Lessons for Mail

The Applix Mail Tutorial provides detailed procedures for using the features of Mail. To run the Tutorial:

1. __ Select Help/Tutorial from the Menu Bar.

2. __ A list of available lessons appears (see below).

Figure 3.2.7.1-5. Mail Tutorial Lessons

3. __ Click left on the topic of your choice.

3.2.7.2 Shared Mail

Shared mail windows function identically to personal mail windows. The difference between shared and personal mail involves mail accessibility. With shared mail, all users have access to the mail messages. Personal mail restricts access to the specified username in the header information of the mail message.

1. __ To open shared mail, from the Desktop double click left on the Email icon. The Email Desktop window appears. Double click on the Shared_Email icon. The shared mail inbox window appears.

2. __ Shared mail functions similar to Personal Mail with the noted exception that shared mail may be read by anyone logging onto the system.

3.2.8 Intelink

Intelink uses the Mosaic Document Viewer to access various linked files. Network connectivity to the intelink server is required.

1. __ From the desktop double click on the Intelink icon. The Mosaic interface for intelink opens as shown below:

Figure 3.2.8-1. Intelink Mosaic Window.

2. __ Double clicking left on highlighted (i.e., colored) text links the user to additional information about the word or phrase selected. Several documents or homepages detail more information about a series of hyperlinked files.

3. __ Intelink focuses on homepages from various members of the intelligence community that provide information to other members of the intelligence community.

Intelink Help / Training

1. __ From the Intelink main window, click on the colored text, Training, under the Services section. The Community Intelink Training Version 2.0 page opens listing the following options:

   a. Basic Skills
   b. Advanced Skills
   c. Course Outline
   d. Reference Materials
   e. Search the Training System

2. __ Click left on the desired training area to access Intelink training.

Exiting Intelink

1. __ There are three ways to exit Intelink:
   a. Click left on the File pulldown menu and select Exit.
   b. Close the window by double clicking left on the window close button in the upper left corner of the window, or by clicking left and selecting Close.
   c. Click on the Close button from the bottom of the Intelink window.

3.2.9 Corporate Services

Corporate Services reserves a windowing environment for additional, optional applications at the sites' discretion. Corporate Services includes, but is not limited to, the following applications:

Oilstock - mapping package.
5D Client - imaging application.
Dice - JDISS Digital Camera Environment provides support to parallax video card.
Coliseum Client - Coliseum RFI servers.
Frameviewer - viewing tool for Framemaker documents.
Adobe Acrobat - graphics file format conversion package.
JWICS Scheduler - terminal emulation interface to the JWICS scheduling system.
Sirads - interface to USACOM database software.
XLamps - enables JDISS users to possess USACOM LAMPS functionality.
XLaunch - USACOM automatic applications launch.
XStairs - facilitates queries on USACOM IDHS.
EUCOM Conversion Utility - numeric conversion software for latitude/longitude, metric, etc.

3.2.10 Mapping

ARC_INFO is an optional JDISS package that handles mapping functions.

3.2.11 JDISS Help

JDISS Help is an on-line system help for JDISS. It includes JES, JDISS Embedded Support, which is an interactive audio / video tutorial for JDISS as well as on-line documentation for the User's Guide (the same document that you are now reading). The JDISS Help is intended as a system reference and refresher training. It is not intended to replace formal JDISS training.

3.2.11.1 JES

1. __ From the Desktop, double click left on the JDISS_Help icon; the JDISS_Help Desktop opens. Double click left on the JES icon. The JDISS Embedded Support tutorial begins.

Figure 3.2.11.1-1. JES Window

2. __ From the JES tutorial, click left on the Table of Contents to view other lessons.

Figure 3.2.11.1-2. JES Table of Contents Window

3.2.11.2 Users_Guide

In addition to the on-line help that most of the JDISS applications provide, this Reference Manual is available on-line. The Reference Manual is divided into four sections:

- Introduction contains the Release Notes, Scope, and Referenced Documents sections.
- Procedures contains the Execution Procedures, the "how-to" part of the Document.
- Appendix contains the Glossary, User Interface Fundamentals, Security Manager, System Administrator, and appendices.
- Quick Ref is the on-line version of the Quick Reference Handbook.

To access the on-line Documents

1. __ Move the pointer to the JDISS Help icon in the Desktop. The JDISS Help window opens.
2. __ Move the pointer to the Users Guide icon and double click left to open the Users Guide window.
3. __ Move the pointer to the Users Guide icon for the subject of your choice and double click left. This will launch the Applix Words application and display the section of the manual that you requested in a read-only Applix window.
4. __ To close the document, choose File/Exit from the menu bar. The document closes.
5. __ To return to the X.desktop (<System_Name>) window, move the cursor to the JDISS Help window's System Menu button, click left to pop-up the System Menu, move the cursor to the Close menu item, and click left. The window closes.

3.2.6.12 Screen Lock

JDISS provides you with the ability to deny access to your system without logging out. To use the Screen_Lock function:

1. __ Move the pointer to the Screen Lock icon in the Desktop window and double click left. This places the system in the screen saver mode, the system paints abstract designs on the screen.
2. __ To unlock your screen, click left or hit anyone of the keyboard keys, the system will prompt you with:

   Name: <User name>
   Password:

Enter your password and depress the [Enter] key, or click left on the OK button.

3.2.13 Shared Directory

The Shared Dir (Shared Directory) allows the user to make files available to other users, other systems, and some JDISS applications

Shared Dir is a "public area" where files are accessible to any JDISS user. Use the Shared Target icon (discussed below) to move files owned by you to the Shared Dir so that other users can view them. The following sub-directories are available in Shared Dir:

· Documents - files with .aw, .ag, .am, .as (Applix documents) or .wp (documents) or .doc (generic) extensions that are dropped on Shared Target will go here. Also the source directory for Send Documents.

· Images - files with .pidf, .ntf, .tif, or .rgb extensions that are dropped on Shared Target will go here. Also the Images directory for ELT as well as the source directory for Send Images.

· Other - anything else that was dropped on Shared Target.

3.2.14 Shared Target

Shared Target is a drag and drop function on the Desktop Window. By dragging a file from one directory window and dropping it on the Shared Target icon, you are copying that file to the Shared Directory appropriate for that file type (Documents, Images, or Other). The file then becomes available to other users to view. Only the file owner can edit or delete the file.

To use the Shared Target icon

1. __ Select the file to drag from an open Directory Window (Open directory windows by clicking left on the File pulldown menu on the Desktop, and clicking left on Open. Type in the pathname of the directory.)

2. __ Drag the selected objects to the Shared Target icon. The border around the icon turns green when the file is over the target.

3. __ Drop the file on the target. The file goes to the appropriate directory.

3.2.15 Home

The Home icon on the Desktop window displays the contents of the /home/(username) directory. Each user has a unique and specific home directory.

3.2.16 Trash

The Trash function, represented by a Trash can icon, provides an easy way to delete unneeded directories or files. Trash uses the Unix rm command to erase or delete selected items from the system. Depending on how the specific system is set up, the Trash function may or may not give a second chance to confirm the deletion.

Figure 3.2.16-1. Trash Window

To permanently remove an item (or items) using the Trash function:

1. __ Click left on the object to select the file(s) to delete.

2. __ Drag the selected objects to the Trash can and drop them in.

The Trash icon changes to appear full. At this point the trashed objects have been moved to the Trash file.

To empty the Trash

1. __ Double click left on the Trash icon. The trash window appears. Highlight the files to be deleted by clicking left once on the file and then click left on the File pulldown and click left on Empty to remove the specified file(s).

Depending on how your system is set up, either:

The system will pop up a confirmation window that asks if you really want to delete the items in the trash file.

2. __ Select Yes to delete the items in the Trash file and return the Trash icon to its original shape or No to stop the Empty Trash function and leave the items in the Trash fold

Or

The system will delete the items in the Trash file and return the Trash icon to its original shape without confirmation.

3.2.17 Print Target

Print Target acts as a depository for print jobs.

1. __ From the Utilities window, click left and drag a file onto the Print Target icon, the specified file is printed to the local printer.

3.2.18 Screen Lock

Screen Lock restricts machine access while leaving the machine logged into the network. This function permits users to "take a break", leave the terminal logged in and running while disabling access to the screen applications from anyone passing by the system.

1. __ From the Utilities window, double click left on the Screen Lock icon. A patterned display screen replaces the JDISS screen.

2. __ To return to JDISS operations, either move the mouse or click on one of the keys from the keyboard. A login window appears prompting for the password. Enter the password for the user logged onto the system. JDISS windows reappear.

3.2.19 System Services

System Services provides the user limited access to the client-server environment applications. Specific icons are assigned by the system manager for specific roles of each user, consequently not all users may have identical icons to access applications. A detailed listing of the available icons are in Appendix B of this reference manual.

1. __ From the user desktop window, click left on the System_Services icon.

OR

1b. __ From the background menu, click right and select the OPER access. The OPER access window opens.

?5. NOTES

5.1 Glossary

This Glossary contains operational definitions of terms needed by JDISS operators. The definitions in this section are written in general terms in an effort to promote understanding. Many of the references supplied with the system also contain glossaries.

Application - software that solves a particular set of problems or accomplishes a particular job for a User or set of Users. JDISS is an application.

Background - on the desktop, the "canvas" that objects are drawn on; the workspace area behind displayed directories and files.

Boot - the act of starting an operating system. The term is a short form of the term bootstrap program.

Bottom shadow - on the desktop, the shadow that appears on the bottom and right edges of three-dimensional objects.

Central Processing Unit - the unit of a computer system that includes the electronic circuits that control the interpretation and execution of instructions. The central processing unit typically includes an arithmetic-logic unit, a control unit, and a primary storage unit.

Daemon - Unix for a background process that is spawned by another running process. This term comes from Greek mythology, an entity that is between a god and man.

Desk Top - the background screen, which contains icons, windows, and menus.

DOD-STD-2176A - the DOD Standard that establishes uniform requirements for software development that are applicable throughout the system life cycle. The requirements of this standard provide the basis for Government insight into a contractor's software development, testing, and evaluation efforts.

Double click - to click a mouse button twice in rapid succession.

Drag - the action of selecting and then moving a screen object with the mouse.

Foreground - on the desktop, all items drawn on the background, for example: buttons, checkboxes, icons, text, etc.

Hard Disk - a flat circular plate with a magnetic surface on which data can be stored by selective magnetization.

Hardware - devices capable of accepting and storing computer data, executing a systematic sequence of operations on computer data, or producing control outputs. Such devices perform substantial interpretation, computation, communication, control, or other logical functions.

Icon - a small screen image that represents a closed window or other object.

Login - to gain access to the system, usually by typing a user name and password, so that a user can begin a work session.

Logout - to end a session on the system, usually when work on the system is finished and you do not want another user to have access to your account.

Main Memory - see Primary Storage Unit.

Menu - a list of choices that represents actions, commands, or settings that is choosen from with the mouse. Display a menu by pressing the right mouse button.

Monitor - the video display device.

Mouse - a handheld optical device that, when moved on the mouse pad, controls the position of the pointer on the desktop. See Trackball.

Operating System - software that controls the execution of computer programs and that may provide scheduling, storage assignment, input/output control, other peripheral control, data management, and other related services. Unix is an operating system.

Reference Manual - provides information and detailed procedures for initiating, operating, monitoring, and shutting down a computer system and for identifying/isolating a malfunctioning component in a computer system

Peripheral Device - any unit of equipment distinct from the central processing unit that may provide the system with outside communications.

Primary Storage Unit - the device into which programs and data can be entered, held, and retrieved from on demand. The primary storage unit may also be referred to as "core," "main memory," or "RAM."

Pointer - the distinctive shape, usually an arrow pointing "northwest," whose position on the screen is controlled by the mouse or trackball.

Root Login - see Superuser.

Software - a combination of associated computer instructions and computer data definitions required to enable the computer hardware to perform computational or control functions.

Superuser - a privileged user who has access to every portion of the system.

Top shadow - on the desktop, the shadow that appears on the top and left edges of three-dimensional objects.

Trackball - a pointing device that contains three buttons and a small freely rotating ball. Movement of the ball controls the position of the pointer on the desktop. See Mouse.

Unix - the name of a computer operating system and its family of related utility programs. Unix is the operating system that executes the JDISS application. Unix is a trademark of AT&T Bell Laboratories.

Version - an identified and documented body of software. Modifications to a version of software (resulting in a new version) require configuration management actions by either the contractor, the contracting agency, or both.

Zulu - The time zone designation for Greenwich Mean Time, used as the standard reference time for all messages and most other military purposes.

5.2 List of Acronyms

A/C.....Alternating Current
ASCII.....American Standard Code II.
CD.....Compact Disk
COTS.....Commercial Off-The-Shelf
CPU.....Central Processing Unit
CSE.....Client-Server Environment
DEC.....Digital Equipment Corporation
DIA.....Defense Intelligence Agency
DITDS .....Defense Intelligence Threat Database System
DoD.....Department of Defense
DoDIIS.....Department of Defense Intelligence Information System
DOS.....Disk Operating System
DPI.....Dots Per Inch
DTG.....Date Time Group
ELT2.....Electronic Light Table 2
EPS .....Encapsulated Postscript
E-mail.....Electronic Mail
FTP.....File Transfer Protocol
GB.....Giga Byte
GOTS.....Government Off-The-Shelf
GUI.....Graphical User Interface
IP.....Internet Protocol
IPU.....Intelligent Processing Unit (Canon CJ10)
I/O.....Input/Output
ISSO.....Information Systems Security Officer
JAMPS.....Joint Automated Message Preparation System

JDISS.....Joint Deployable Intelligence Support System
JES.....JDISS Embedded Support
JIC.....Joint Intelligence Centers
JTF.....Joint Task Forces
JUIC.....JDISS Universal Imagery Client
KFLOPS.....Thousand Floating Point Operations Per Second
LAN.....Local Area Network
MB.....Mega Byte
MIPS.....Million Instructions Per Second
NFS.....Network File System
NIS.....Network Information Server
NITF.....National Image Transfer Format
NVDET.....Network Virtual Data Entry Terminal
O/S.....Operating System
PIDF.....Paragon Imagining Data Format
PPM.....Pages Per Minute
PROM.....Programmable Read Only Memory
RAM.....Random Access Memory
RDIST.....Remote Distribution
RISC.....Reduced Instruction Set Computer
RGB.....Red, Green, Blue
ROI.....Region Of Interest
ROM.....Read Only Memory
SCSI.....Small Computer System Interface
SM..... Security Manager
TELNET.....Telecommunications Network
TIFF.....Tagged Image File Format

U&S.....Unified and Specified
UPS.....Uninterruptable Power Source
WYSIWYG.....What You See Is What You Get
X11R5.....X Windows System Version 11, Release 5